Augustus

The sample of Augustus's coins preserved in the Capitoline Coin Cabinet consists of 459 coins and a lead tessera (Table 1).²⁷

Table 1 - Augustus: specimens of the Capitoline Museums

Provenance	No. of items
SSU 2	302
C.A.	93
Excavation	52
C.A. or Excavation	13
Total	460

The coins of Augustus coming from various excavations in the city of Rome were added to the denominations of the miscellaneous sample from the Capitoline collection (totalling 408 identifiable specimens with certain date²⁸) at a later stage; they are: Roman Forum,²⁹ "Sito "B" – Testaccio",³⁰ "Terme di Diocleziano",³¹

³¹ CANDILIO 1988

²⁷ Some specimens are countermarked: Musei Capitolini inv. no. 17338 and inv. no. 17431 (with LXII); inv. no. 17204 (with CA[-]) of the age of Tiberius see RIC I², 10; about the origin of the late-antique countermarks see the interesting hypothesis put forward by ASOLATI 2012, 113-132 with previous bibliography.

²⁸ Besides, the specimens having uncertain dating (43 pieces), 4 plated denarii (Musei Capitolini inv. no. 10784 = RIC I² 86a; inv. no. 17401 = RIC I² 171a; inv. no. 3121 = RIC I² 187b and inv. no. 10800 = RIC I² 288) and 2 imitation asses issued earlier than 7 BC, have been excluded from the total illustrated in the diagram.

²⁹ Reece 1982.

³⁰ TRAVAINI 1985.

"Meta Sudans",³² "Via G. Sacchi (Trastevere / Gianicolo)",³³ temple of Castor and Pollux.³⁴ The sample reported by von Kaenel³⁵ has been excluded as it was inaccurately published and because the quantification of the coins issued in the last Augustan minting phase is missing.

At a later stage, Rome's material has been compared with the coins coming from some sites of central-southern Italy: Ostia,³⁶ Minturnae,³⁷ Pompeii³⁸ and the hoard of Pompeii's Thermopolium, ³⁹ Paestum.⁴⁰

Chronology according to RIC I ²	Emerita	Spain uncertain	Lugdunum	Italic uncertain	Rome	Oriental mints	RIC I ²
29 – 27 BC				9			D: 252 (1), 264 (1), 267 (1); Q : 276 (2+3+1 R=6)
25 – 23 BC	3						Q: 1a – b (3)
20 – 19 BC		1					D: 51 (1)
19 – 18 BC		4			3		D: 75a (1), 86a (1), 87a (1), 102 (1), 287 (1 R), 288 (1), 300 (1)
15 – 13 BC			1				D: 167a (1)
12 BC			1		1		D: 174 (1); 416 (1)
11 – 10 BC			1				D: 189a (1)
8 – 7 BC			1				D: 199 (1)
2 BC – AD 4			4				Au: 206 (2); D: 207 (2)
Total	3	5	8	9	4	-	29

Table 2 – Augustus, Rome: gold and silver coins with ascertained dating

(legenda: without any letter = Capitoline Collection; R=REECE 1982)

³³ CATALLI 2008.

³⁴ ZAHLE 2008.

³⁵ The values referring to the years AD 8-12 are generically defined by VON KAENEL 1999, 369 "*ein erstaunlicher Zahl vertreten sind*".

³⁶ Spagnoli 2007, 324-327 nos 104-143.

³⁷ BEN-DOR 1935, 95-96 nos 82-97; Liri I: FRIER-PARKER 1970, 95; Liri II: METCALF 1974, 45; Liri III: HOUGHTALIN 1985, 71; GIOVE 1998, 166-172 nos 532-632 (for the complete references see the *Appendix*).

³⁸ TALIERCIO MENSITIERI 2005 (*Regio* IX); CANTILENA 2008 (*Regio* VI); RANUCCI 2008; GIOVE 2013 (*Regio* I); HOBBS 2013; PARDINI TESI (for complete bibliographic references see the *Appendix*).

³⁹ CASTIELLO-OLIVIERO 1997, 110-112 nos 25-47.

⁴⁰ CANTILENA *et alii* 2003, 35-37.

³² MOLINARI 1995.

Chronology according to RIC I ²	Chronology according to Mattingly- Burnett or other author	S	Dp	As	Sem	Qd	RIC I ²
25 – 23 BC		-	-	2	-	-	As : 486 (2) ¹
18 BC		1	3	-	-	-	S : 328-329 (1R); Dp : 324 (1R), 326 (1), 334 (1)
17 BC	17 BC	5	3	-	-	-	S: 341 (1), 345 (4); Dp: 342 (1+1R=2), 349 (1)
16 BC	22 BC	8	10	28	-	-	S: 370 (3), 374 (2+2R=4), 377(1); Dp: 371 (1), 372 (2), 375 (3), 378 (4); As: 373 (7), 376 (8+4R= 12), 379 (6+3R=9)
16 – 10 BC	9-3 ВС ^{II}	-	-	1	3	-	As : 155-157 (1) ^Ⅲ ; Sem: 230 (3)
15 BC	23 BC	2	11	55	-	-	S: 380 (1), 387(1); Dp: 384 (3+1R=4), 388 (6+1T=7); As: 382 (14+1C=15), 385 (3), 386 (16+1R=17), 389 (18+2M=20)
9 BC		-	-	-	-	43	Qd: 420 (12+4R=16), 421 (12 +3R =15), 422 (8+4R=12)
9 – 3 BC		-	-	1	-	-	As: 158 (1)
8 BC		-	-	-	-	10	Qd: 423 (2), 424 (3), 425 (4 +1 R = 5)
7 BC		-	-	102	-	-	As: 427 (19+2R=21), 428 (3+1M=4), 427-428 (1), 431 (23+4R+1T+3M+1Ct =32), 432 (4+1R=5), 431-432 (2), 435 (25+3R=28), 436 (9)
6 BC		-	-	23	-	-	As: 437 (4), 439 (11), 441 (3), 442 (1+1M=2), 437-438 (1R), 439-440 (2R)
5 BC		-	-	-	-	43	Qd: 443 (1R), 445 (3), 446 (1R), 449 (1), 450 (2+1R=3), 451 (2), 453 (2+1R+1M=4), 454 (1+1M=2), 458 (1+1R=2), 459 (4+1R=5), 460 (1), 461 (2R), 462 (3), 464 (1+1R=2), 443-464 (4+1M=5), 449 or 455 (2), 451 or 452 (2), 457 or 463 (1), 458 or 460 (1)
4 BC		-	-	-	-	54	Qd: 465 (10+3R=13), 466 (8+1R=9), 467 (9+2R=11), 468 (15+4R+2M=21)
AD 8-14		-	-	52	4	-	As: 159-161 (2). ¹ V 245 (1), 469 (8+2M+1Ct=11), 470 (1), 471 (31+3R+1Z=35), 469 or 470 (2) Sem: 234 or 239 or 243 or 246 (3); 246 (1)
Total		16	27	264	7	150	464
I = RPC 22 II For the d	235. ating of this series of	f Lugdun	um see V	AN HEES	сн 1993	535-539	

Table 3 - Augustus: Rome, base metal coins with ascertained dating

 $\begin{array}{ll} \text{III} &= \text{RPC 523.} \\ \text{IV} &= \text{RPC 525.} \end{array}$

(legenda: without any letter = Capitoline Collection; R = REECE 1982; T = TRAVAINI 1985; C = CANDILIO 1988; M = MOLINARI 1995; Ct = CATALLI 2008; Z = ZAHLE 2008)

Chronology according to RIC T ²	Chronology according to Mattingly- Burnett or other author	S	Dp	As	Sem	Qd	RIC I ²
16 BC	22 BC	-	-	2	-	-	As: 373 (2)
15 BC	23 BC	-	-	-	-	-	-
9 BC		-	-	-	-	3	Qd: 420 (1); 421(2)
8 BC		-	-	-	-	1	Qd: 423 (1)
7 BC		-	-	2	-	-	As: 427 (1); 431 (1)
6 BC		-	-	1	-	-	As: 441 (1)
5 BC		-	-	-	-	5	Qd: 446 (2); 447 (1); 443-464 (2)
4 BC		-	-	-	-	9	Qd: 467 (7); 468 (2)
AD 8-14		-	-	4	-	-	As: 469 (1); 471 (3)
Total		-	-	9	-	18	27

Table 4 - Augustus: Ostia, base metal coins with ascertained dating

Table 5 – Augustus: Minturnae, base metal coins with ascertained dating

Chronology according to RIC I ²	Chronology acc. to Mattin- gly / Burnett	D	Q	S	Dp	As	Sem	Qd	RIC I ²
29 – 27 BC			3						Q : 276 (3FP)
18 BC		1		1					D: 310 (1FP); S: 323 (1H)
17 BC	17 BC			2	1				S: 345 (1H+1G=2); Dp: 347 (1FP)
16 BC	22 BC				2	14			Dp: 372 (1BD), 371-372 (1G); As: 373 (1FP+1H+4G=6), 376 (1FP+1G=2), 379 (1BD+1FP+1M+3G=6)
15 BC	23 BC				3	33			Dp: 384 (1 M+2H=3); As: 382 (1 BD+1FP+3M+2H+7G ¹ =14), 386 (5G), 385-386 (1 FP), 389 (1 BD+1FP+1M+1H+9G=13)
9 BC								19	Qd: 420 (1FP+1M+2H+5G=9), 421 (1BD+1FP+2M+1H+3G=8), 422 (1FP+1G=2)
8 BC								7	Qd: 423 (1FP+3G=4), 424 (1FP), 425 (1FP+1H=2)
7 BC						31			As: 427 (2BD+6FP+1M+1H+3G=13), 428 (1BD+1FP+1G=3), 431 (3FP+2M+3G=8), 432 (1G), 435 (1M+1H+4G=6)

6 BC						7			As: 439 (2BD+1FP+ 1G =4), 441 (1BD+1FP+ 1G =3)
5 BC								22	Qd: 443 (1FP+ 1G =2), 444 (1H), 447 (1G), 449 (2M), 450 (1M+1H=2), 451 (2G), 452 (1H), 456 (1G), 459 (1M+1H+3G=5), 460 (1FP), 462 (1G), 464 (1H+2G ^{II} =3)
4 BC								26	Qd: 465 (2FP+1H+4G=7), 466 (2FP+4G=6), 467 (2FP+2M+1H+2G=7), 468 (3FP+2G=5), 465-468 (1G)
2 BC – AD 4		1							D: 207 (1BD)
AD 8 – 14						17			As: 469 (1FP+3G=4), 470 (3FP+1M=4), 471 (1BD+2FP+5G=8), 469-470 (1G)
Total		2	3	3	6	102	-	74	190
One of these coins was misinterpreted as RIC I ² 395 These two coins were misclassified as RIC I ² 447									

(legenda: BD = BEN-DOR 1935; FP = FRIER – PARKER 1970; M = METCALF 1974; H = HOUGHTALIN 1985; G = GIOVE 1998)

Chronology according to RIC I ²	Emerita	Spain uncertain	Lugdunum	Italic uncertain	Rome	Oriental mints	RIC I ²
31 – 29 BC				5			D: 252 (1G), 254b (3G), 263 (1H);
29 – 27 BC				16			D: 264 (4 G), 265a (4 G), 267 (2 G), 271 (1 C), 272 (1 G), 274 (1 C +1 G =2); Q: 276 (1 G +1 H =2)
25 – 23 BC	5						D: 2b (1G), 4 (1G), 4b (1C+1G=2), 7a (1G)
21 – 19 BC						3	D: 475 (1C); Q : 474 (1C+1H?=2)
19 BC		5			10		Au: 321 (1C); D: 64 (1G), 75a (2G), 79a (1C+1G=2), 289 (1G), 292 (1G), 300 (1C+2G=3), 306 (1G), 322 (1C+2G=3)
18 BC		1					D: 119 (1G)
19 – 18 BC		10				1	D: 37a (5 G), 37b (3 G), 41 (1 G), 42b (1 G), 525 (1 G)
17 BC					1		D: 340 (1G)
16 BC					1		D: 359 (1G)
18 – 16 BC		4					Au: 125 (1C), 149 (1C); D: 134b (1G), 150a (1G)
13 BC					1		D: 408 (1G)
15 – 13 BC			8				Au: 170 (1C); D: 162 (1G), 167a (1C+1G=2), 171a (4G)
11 – 10 BC			2				D: 178a (1G), 197a (1G)

Table 6 – Augustus: Pompeii, gold and silver coins with ascertained dating

8 – 7 BC			1				D: 199 (1G)
2 BC – AD 4			2				Au: 204 (1C); D: 207 (1G)
AD 13-14			1				D: 220 (1G)
Total	5	20	14	21	13	4	77

(legenda: C = CANTILENA 2008 (Regio VI); G = GIOVE 2013 (Regio I); H = HOBBS 2013)

Table 7 - Augustus: Pompeii, base metal coins with ascertained dating

Chronology according to RIC I ²	Chr. according to Mattingly/ Burnett	S	Dp	As	Sem	Qd	RIC I ²		
18 BC			1				Dp: 326 (1TM)		
16 BC	22 BC	1	1	7			S: 374 (1 G); Dp: 378 var. (1 G); As: 373 (1 G+1H=2), 376 (1 G+1H=2), 379 (1 TM+1H+1P=3)		
15 BC	23 BC		1	18			Dp: 384 (1H); As: 382 (5G+4H=9), 386 (2G + 2H+1P=5), 389 (3G+1H=4)		
9 BC						33	Qd: 420 (1TM+2C+4G+4H +1P=12), 421 (3G+4H+1P=8), 422 (1C+6G+6H=13)		
8 BC						6	Qd: 423 (1TM+1C+2G+1H=5), 425 (1H)		
7 BC				21			As: 427 (2G), 428 (1G+4H=5), 427-428 (1C), 431 (1G), 432 (4G), 435 (1R+2G+3H+1P =7), 436 (1H)		
6 BC				4			As: 437 (1C), 439 (1TM), 440 (1G), 441 (1H)		
5 BC						20	Qd: 443 (1G), 444 (1G), 447 (1H), ¹ 451 (1TM+1H ^{II} =2), 452 (1H), ^{III} 456 (1P), 457 (2G), 458 (1TM+1H ^{IV} =2), 459 (1C+2H ^V =3), 462 (1G), 463 (1TM), 464 (1P), 443-464 (1C+1G ^{VI} +1H=3)		
4 BC						16	Qd: 465 (1G+3H+1P=5), 466 (1C+2G=3), 468 (1C+4G+2H ^{VII} =7), 465-468 (1G)		
AD 8-14				13			As: 469 (1TM+3G+4H+1P=9), 469-470 (1G), 471 (1G+2P=3)		
Total		1	3	63	-	75	142		
 HOBBS 2013, 169 no. 1096: this coin was misinterpreted as RIC I² 443 var. II <i>Ibidem</i>, no. 1091: this coin was misinterpreted as RIC I² 443 var. IV <i>Ibidem</i>, no. 1092: this coin was misinterpreted as RIC I² 447 var. V <i>Ibidem</i>, nos 1093: 1094: these coins were misinterpreted as RIC I² 450 var. V <i>Ibidem</i>, nos 1093: 1094: these coins were misinterpreted as RIC I² 450 var. V <i>Ibidem</i>, nos 1093: 159: this coin was misinterpreted as RIC I² 433 ff 									

VII HOBBS 2013, 169 but CATVLLVS and not CATALLVS.

(legenda: TM = TALIERCIO MENSITIERI 2005; C = CANTILENA 2008; R = RANUCCI 2008; G = GIOVE 2013; H = HOBBS 2013; P = PARDINI TESI)

Chronology according to RIC I ²	Chronology according to Mattingly/ Burnett	S	Dp	As	Sem	Qd	RIC I ²
25 BC				1			As: 486 (1)
17 BC	17 BC	1					S: 345 (1)
16 BC	22 BC			1			As: 373 (1)
15 BC	23 BC			4			As: 382 (2), 385 (1), 389 (1)
9 BC						2	Qd: 422 (2)
7 BC				2			As: 432 (1); 435 (1)
6 BC				3			As: 437 (1); 439 (1); 441 (1)
5 BC						1	Qd: 459 (1)
AD 10-12				5			As: 469-470 (1); 471 (4)
Total		1		16		3	20

Table 8 - Augustus: Pompeii (Thermopolium I, 8, 8d), base metal coins with ascertained dating

Table 9 - Augustus: Paestum⁴¹, base metal coins with ascertained dating

Chronology according to RIC I ²	Chr. according to Mattingly/ Burnett	D	S	Dp	As	Sem	Qd	RIC I ²
25 BC					1			As : 486 (1)
16 BC	22 BC		1		1			S: 374 (1); As : 373 (1)
15 BC	23 BC				4 ¹			As : 382 (1); 389 (3)
8 BC							1	Qd: 425 (1)
7 BC					5			As: 428 (1); 431 or 435 (1); 432 (1); 435 (2)
5 BC							2	Qd: 447 (1); 443 or 453 (1)
4 BC							2	Qd: 465 (1); 466 (1)
2 BC – AD 4		1						D: 207 (1)
AD 8 – 14					3			As: 469 (1); 471 (2)
Total		1	1		14	-	5	21
I The coins of	of 15 BC with head of	of Augus	stus on t	he obver	rse are o	bviously	asses.	

⁴¹ The discoveries of precious metals taken into account for Paestum do not include materials relating to the hoard published by CANTILENA 2000, 81-91. In detail, as regards the chronological intervals considered so far, they amount to 98 denarii subdivided as follows: 31-29 BC (1 pc., RIC I² 535); 29-27 BC (29 pcs, RIC I² 250a-b; 252-254b; 256; 264-267; 269-272; 274; 545); 25-23 BC (2 pcs, RIC I² 2b; 9a); 21 BC (1 pc., RIC I² 472); 20-18 BC (38 pcs, RIC I² 33a; 36a-37b; 42a; 43b; 86a; 105a-105b; 120; 288; 297; 299-300; 304; 310-311; 313; 318; 322; 515; 525); 18-16 BC (10 pcs, RIC I² 167a; 173a; 398-399; 407-408; 410); 12 BC (7 pcs, RIC I² 412; 416).

First of all, the limited quantity of available data of Pompeii has to be highlighted. In fact, even if "the economy of Pompeii was clearly heavily monetised by the time the eruption occurred"⁴², just a bunch of coins can be read properly. However, some considerations can nonetheless be put forward: in at least four contexts (Rome, Minturnae, Pompeii and Paestum), the occurrence of precious metal coins is remarkable, diversely from what emerges in the following period, during the reign of the other Julio-Claudian emperors.⁴³ This seems to conform with the evidence regarding the period prior to the Augustan age: in the republican period the percentage of finds of silver coins in Rome is very high (around 33%).⁴⁴ Brass and bronze coinage of the mint of Rome is also widely attested, but the occurrence of Asiatic coins, perhaps of the mint of Ephesus, is also remarkable (Rome, at the Thermopolium and Paestum). Rare bronze specimens minted at Lugdunum and Nemausus⁴⁵ come from the "sottosuolo urbano"⁴⁶, Ostia⁴⁷ and Pompeii⁴⁸ only, which delineates a coin distribution very similar to that evidenced in the Noricum.⁴⁹

The sestertii and dupondii of Rome's mint are seldom found in the other towns of Latium and Campania while they appear substantially in Rome. Asses constitute the most common denomination for all the sites, even if, in the case of Rome, the group of quadrantes published by King⁵⁰ must not be taken into account in a general estimate of the coins because, as the author states,⁵¹ they are a selection, based on a single coin denomination, from the material originally lying in the Tiber river.

⁴³ As also shown in DUNCAN-JONES 2003, 169 pl. 6

- ⁴⁴ BURNETT-MOLINARI (in press) on the ground of data processed by Marta Barbato.
- ⁴⁵ As already noticed by VON KAENEL 1999, 369.

⁴⁶ Musei Capitolini inv. nos 17411-17413 (Nemausus) and Musei Capitolini inv. nos 17417, 17426-17427 (Lugdunum) of uncertain dating has to be added to the specimens listed in the table.

⁴⁷ SPAGNOLI 2007, 324 nos 104-105 not included in the table as their dating is not ascertained.

- ⁴⁸ HOBBS 2013, 166 nos 1047-1048 (Nemausus) of uncertain dating.
- ⁴⁹ Krmnicek 2010, 49-51.

⁵⁰ KING 1975, 82: RIC I² 420 (30); RIC I² 421 (31); RIC I² 422 (19); RIC I² 423 (3); 83: RIC I² 424 (3); RIC I² 425 (7); RIC I² 443 (3); RIC I² 445 (3); RIC I² 447 (3); RIC I² 448 (1); RIC I² 449 (1); RIC I² 450 (5); RIC I² 451 (2); RIC I² 453 (10); RIC I² 454 (6); RIC I² 455 (1); RIC I² 456 (2); RIC I² 458 (5); RIC I² 459 (7); RIC I² 460 (6); RIC I² 461 (1); RIC I² 462 (8); RIC I² 463 (1); RIC I² 464 (9); RIC I² 445 or 459 (2); 1 SISENNA APRONIVS IIIVIR SISENNA GALVS AAAFF SC (incorrect pairing of obverse and reverse dies); 84: RIC I² 443-464 (15); RIC I² 465 (17); RIC I² 466 (14); RIC I² 467 (23); RIC I² 468 (30).

⁵¹ KING 1975, 57-58: "it is impossible to form any useful estimate of the proportion of quadrantes to other denomination among the coins that were originally lying in the river".

⁴² Hobbs 2013, 10.

However, in Rome, Minturnae and Pompeii the quadrantes are rather common and, as observed by King,⁵² an analysis of these denomination by issue shows a fairly equal distribution of pieces for the first, third and fourth series.

In the case of Pompeii, Hobbs⁵³ notices a discrepancy between the quadrantes of 5 BC described in the new edition of RIC and the coins from *Regio* VI in his own publication; therefore, he surmises the existence of a considerable group of imitations. Actually, the coins illustrated by Hobbs with photographs are not imitations; maybe the problem lies in the erroneous description of these pieces provided by the new edition of RIC, where types and legends do not match correctly.⁵⁴



Chart 1 - Augustus: comparison of the denominations by find's site

Chart 1 evidences that, for the "bronze of Rome", the two groups with the four colleges of *L. Naevius Surdinus*, *Cn. Pisus*, *C. Plotius Rufus* / *C. Asinius Gallus*, *C. Cassius Celer*, *C. Gallus Lupercus* and *P. Lurius Agrippa*, *M. Maecilius Tullus*, *M. Salvius Otho* / *A. Licinius Nerva Silianus*, *Sex. Nonius Quintilianus*, *Volusus Valerius Messala* feature the highest percentage of asses of the entire Augustan period, in much the same way as it is recorded in the north-west provinces of the

⁵² King 1975, 60.

⁵³ HOBBS 2013, 69 and 363.

⁵⁴ The legend with the names of two *tresviri* and IIIVIR matches with the altar; on the other side the names of the other two and AAAFF matches with S C as in GIARD 1988, 132-137.

Empire.⁵⁵ In particular, the findings from Rome (Capitoline coin collection and published sites) are noteworthy, and seem to line up with what is attested in northern Italy, in the Noricum⁵⁶ and the Rhine,⁵⁷ with 46% of the specimens in the first group⁵⁸ and 54% for the second.⁵⁹ On the contrary, Krmnicek,⁶⁰ referring to the finds from the Tiber, calculated 64,7% for the first group and 35,3% for the second; such figures decrease to 59,1% and 40,9% with 499 and 345 coins, when the Capitoline specimens and the other finds from the Rome published so far are added. This percentage is similar to that recorded at Minturnae: the first group features 57,8% on a total of 90 pieces, and the second 42,2%; figures are slightly different at Pompeii, but, including the coins from the Thermopolium, they represent 52,4% and 47,6%.

	Rome ^I	Minturnae ^{II}	Pompeii ^{III}
23 – 22 BC	24,7%	27,8%	19,6%
18 – 17 BC	2,6%	2,7%	0,7%
9 – 8 BC	11,7%	14,4%	27,3%
7 – 6 BC	29,0%	20,3%	18,2%
5 – 4 BC	21,5%	25,7%	25,2%
AD 8 – 12	10,4%	9,1%	9,1%

Table 10 – Augustus, coins divided into chrono	logical	l groups:
percentage of the moneyers "bronze" coins (se	e Chai	rt 1)

I To the 450 specimens in base metal of the mint of Rome of certain dating, 3 specimens of uncertain dating can be added (1 quadrans of 9-8 BC, 1 quadrans of 5-4 BC and 1 as of 7-6 BC) from the Meta Sudans and 1 quadrans of 9-8 BC (Musei Capitolini inv. no. 17288); besides, 2 asses of 23-22 BC (Musei Capitolini inv. nos 17368-17369), 10 asses of 7-6 BC (Musei Capitolini inv. nos 17354-17357; 17359; 17363; 17595-17596; 17598; 17600) and 3 quadrantes of 5-4 BC (Musei Capitolini inv. nos 17322-17323; 17329) can be also added, resulting in a total of 469.

II Out of 187 specimens, also including the quadrantes of uncertain dating of 9-8 BC.

III Out of a total of 143 coins also including: CANTILENA 2008, 283, as of 7-6 BC.

In order to compensate for the different composition of denominations between the first group (sestertii, dupondii and asses) and the second group (asses only), it appears appropriate to recalculate the percentage of coins in asses, resulting in 68,8% for the first period and 31,2% for the second.⁶¹

- ⁵⁵ KRMNICEK 2010, 48 and 104.
- ⁵⁶ IDEM, 104.
- ⁵⁷ WIGG-WOLF 2005, 997 and pl. 5.
- ⁵⁸ With 116 coins.
- ⁵⁹ With 136 specimens.

⁶⁰ KRMNICEK 2010, 104 on the ground of Von KAENEL 1999, 368; according to Krmnicek at Pozzarello there were 77,3% of the coins date back to 16-15 BC or 23-22 BC and 35,3% of the coins to 7-6 BC.

⁶¹ For the first period (= f.p.) 760 asses and for the second (= s.p.) 345 asses (Capitoline Museum

The dating of the different issues has also to be examined in order to ascertain whether there is a relationship between the different bronze issues and particular historical situations. The year of the opening of the mint on the Capitoline hill (23 BC or 19 BC)⁶² has been much debated, because "the proposed chronologies were all, in one way or another, conjectural".⁶³

Scholars usually agree that the "bronze" started after 23 BC⁶⁴ and the aurei and denari did not begin to be minted in Rome before 19 BC, because the types refer to the events of 20 BC; in contrast, they disagree on the date of the bronze. According to H. Mattingly and A. Burnett,⁶⁵ the first college would be that of *Piso-Surdinus-Rufus* which might have struck in 23 BC. In that year the very rare "Numa asses" of the moneyer *Cn. Piso* without SC were issued, representing the first products of the reformed bronze of Rome, created on the occasion of the planned Saecular Games.⁶⁶ Burnett notes that coins of this college⁶⁷ and of *Gallius Lupercus* have been found in two hoards (Velia⁶⁸ and Calvatone⁶⁹); since neither Spanish denarii nor denarii struck by moneyers appear in such hoards, they should be dated earlier than 19 BC.

A recently published *thesaurus* from Campo della Fiera (Orvieto)⁷⁰ shows the same chronological array,⁷¹ supporting Mattingly's arrangement of bronze/brass issues preceding silver/gold series. The hoards' evidence is not the only element con-

⁶⁶ BURNETT 1977, 48.

⁺ other excavations + von Kaenel); at Minturnae the percentage is 66,1% (74 asses) for the f.p. and 33,9% (38 asses) for the s.p.; at Pompeii the percentage is 55,1% (38 asses) for the f.p. and 44,9% (31 asses) for the s.p.

⁶² See Kraft 1951-1952; VON KAENEL 1999, 367-368 and recently Györi 2013, 92.

⁶³ RIC I², 32.

⁶⁴ Since this date Augustus was granted the *tribunicia potestas* and the moneyers' dupondii and asses bear the legend TRIBVNIC POTEST.

⁶⁵ BMCRE, I, 28; BURNETT 1977, 48-32.

⁶⁷ But not the type with Numa that are very rare.

⁶⁸ PONTRANDOLFO 1971-1972, 91-111; BURNETT 1977, 50 on 333 coins there are 38 Roman Republican pieces and 15 Imperial ones: RIC I² 382 (4 asses); RIC I² 383 (1 sestertius); RIC I² 385-386 (2 asses); RIC I² 388 (1 dupondius); RIC I² 389 (6 asses); RIC I² 377 (1 sestertius). See also recently CH, I, no. 111 and CH, II, no. 206; BACKENDORF 1998, 126-127.

 $^{^{69}}$ Burnett-Walker 1981, 9: RIC I² 382 (1 as) and RIC I² 389 (1 as); see now VISMARA 1992 for the complete edition of the hoard.

⁷⁰ RANUCCI 2009 and IDEM 2011.

⁷¹ The hoard includes 205 silver and bronze Republican coins and 10 asses of Augustus: RIC I² 373 (1); RIC I² 376 (1); RIC I² 379 (2); RIC I² 382 (1); RIC I² 386 (4); RIC I² 389 (1). Other 5 asses of Augustus have been found out close to the hoard and the most recent coin is RIC I² 436 (1 as); the other pieces in this layer are RRC 535/1 (1); RIC I² 389 (2); RIC I² 386 (2); see RANUCCI 2011, 110 note 11 (cat. nos 200, 215, 217, 219-221).

firming the date of 23 BC: V. Györi has recently suggested⁷² that "Augustus/Numa Head" issues are the contemporary numismatic parallel to the heroic parade reported in book 6 of Virgil's *Aeneid* that was being written in that year. Considering that, in the beginning, such coins must have "*principally supplied the city of Rome and Italy*",⁷³ it might be correct to associate the production of this very rare issue with the planned Saecular Games, as Burnett suggests, and to connect the very abundant series of *Piso-Surdinus-Rufus* to a significant event that had taken place in that year as, for instance, the *Frumentatio*.⁷⁴

However, scholars agree unanimously on the chronology of *P. Licinius Stolo*, *M. Sanquinius* and *Ti. Sempronius Graccus* college, whose types refer to the Saecular Games of 17 BC.⁷⁵ Besides, this chronology is confirmed by a hoard found at Livno in Bosnia⁷⁶ containing both denarii and Augustan bronzes. It includes eight bronzes – RIC I² 382 (2); RIC I² 384 (1); RIC I² 385-386 (1); RIC I² 371-372 (1); RIC I² 342 (1); RIC I² 345 (2) – with the most recent coin being one of *L. Vinicius* (16 BC). According to Burnett, the hoard, without any denarii from Lugdunum, was probably deposed in 16-15 BC.

The abundant asses of *P. Lurius Agrippa-M. Maecilius Tullus-M. Salvius Otho* have been considered by Mattingly as an issue in relation with the triumph for the conquest of *Raetia* in 7 BC.⁷⁷

However, quadrantes are contemplated as Augustus' last production by a few scholars⁷⁸, although only G.F. Carter and T.V. Buttrey,⁷⁹ on the basis of the metallic composition, do not accept Mattingly's chronology that "provides an overlap in the colleges of *Lamia-Silius-Annius* and *Pulcher-Taurus-Regulus* whose quadrantes he assigns to ca. 9 and 8 BC, before the asses of *Agrippa*, *Tullus* and *Otho*". According to both scholars, analyses suggest that such a chronology cannot be upheld and indicate that a later, even post-Augustan, dating is possible⁸⁰. According to Klein and von Kaenel,⁸¹ on the basis of new analysis, "significant for all four groups of quadrantes is the fact that the silver:nickel ratio is much higher than the asses...

- ⁷³ WOLTERS 2000-2001, 583.
- ⁷⁴ RG 15, 1.
- ⁷⁵ BURNETT 1977, 50; RIC I², 35; WALLACE-HADRILL 1986, 86.
- ⁷⁶ BURNETT 1977, 49.
- ⁷⁷ BMCRE, I, XCVIII; RIC I², 75 note *.
- ⁷⁸ WALLACE-HADRILL 1986, 86.
- ⁷⁹ CARTER-BUTTREY 1977, 60.
- ⁸⁰ contra WALLACE-HADRILL 1986, 83 note 122.
- ⁸¹ KLEIN-VON KAENEL 1999, 67.

⁷² Györi 2013, 100.

which suggests that all quadrantes might belong to one large single compositional group".

However, it is worth noting that a second, very small hoard from Campo della Fiera (Orvieto) includes only asses of 23-22 BC and of 7 BC and no quadrantes.⁸² This could be put down to circulation or chronology reasons, although, at present, there is no evidence as to provide a reliable answer pointing in one or the other direction.

Finally, the last issue is likely to be that of AD 8-12, preceded by a long period of stasis in the bronze production and perhaps of accrual of such coinage by the *princeps*;⁸³ the imitations found in Rome⁸⁴ and Minturnae⁸⁵ must, in all probability, be related to these years of coin shortage.

Owing to the small amount of data available so far on coin finds in Italy's Augustan contexts, it is quite difficult to delineate the circulation rate of these specimens in the other cities of Latium and Campania, although it might have been more rapid than that of Northern Europe where the Augustan coinage reached the provincial areas no sooner than in the first decades of the 1st century, resulting in the dispersion of specimens belonging to 7-6 BC, chronologically closer to the stratigraphy pertaining to the age of Tiberius and Claudius⁸⁶.

F.L. - M.C.M.

- ⁸³ WIGG WOLF 2005, 997.
- ⁸⁴ Musei Capitolini inv. nos 17393 and 13699.
- ⁸⁵ Ben-Dor 1935, 96 no. 97.

⁸² See note 71 in here.

⁸⁶ KRMNICEK 2010, 105-106 and previous bibliography quoted in here. According to WIGG 1999, 110 note 23: "after the defeat of Varus in AD 9, large quantities of moneyers'asses, which had presumably withdrawn from circulation in Italy, were suddenly paid out on the Rhine".